

Training and Evaluation Outline Report

Status: Approved

15 Dec 2014

Effective Date: 13 Oct 2016

Task Number: 05-PLT-5705

Task Title: Retrieve Electrical-Power Generation and Distribution Equipment

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the Fort Leonard Wood, MSCoE foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Supporting Reference(s):

| Step Number | Reference ID | Reference Name | Required | Primary |
|-------------|---|--|----------|---------|
| | ATP 5-19 (Change 001 09/08/2014 78 Pages) | RISK MANAGEMENT http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp5_19.pdf | Yes | No |
| | DA FORM 2258 | DEPRESERVATION GUIDE FOR VEHICLES AND EQUIPMENT | Yes | No |
| | EM 385-1-1 | Safety and Health Requirements. | Yes | No |
| | IEEE | Institute of Electrical and Electronics Engineers | Yes | No |
| | NESCR® | National Electrical Safety Code. 2012 Edition | Yes | No |
| | NETA? | Maintenance Testing Specifications for Electrical Power Distribution Equipment & Systems. 2007 | Yes | No |
| | NFPA 70 | National Electrical Code | Yes | No |
| | NFPA 70E | Standard for Electrical Safety Requirements for Employee Workplaces. 2004 | Yes | No |
| | TM 3-34.45 | ENGINEER PRIME POWER OPERATIONS | Yes | Yes |
| | TM 5-682 | Facilities Engineering: Electrical Facilities Safety. | Yes | No |

Conditions: The element is directed to retrieve an installed power plant with auxiliary support systems, distribution system equipment, and organizational maintenance equipment. The element has all personnel and equipment assigned by Table of Organization and Equipment (TOE).

Note: The Commander must still determine at what level of training they would want the element to perform. Crawl, walk or run. This can only be determined after consideration as to the units training level.

The Commander prior to evaluating an element in the conduct of the task must determine if it will be conducted in a Live, Virtual, or Constructive environment, additionally it must also be determined which condition as described below that the element will conduct the task. The selection made for this task is at a trained level of proficiency. The commander must determine which of the environments below will best suit the unit and the proficiency level at which the unit is. When conducting crawl or walk level training units should not increase the intensity until the unit has achieved the standards and then unit trainers should include variables that increase proficiency in all conditions.

Note: The condition statement for this task is written assuming the highest training conditions reflected on the Task Proficiency matrix required for the evaluated unit to receive a "fully trained" (T) rating.

Note: Condition terms definitions:

Dynamic Operational Environment: Three or more operational and two or more mission variables change during the execution of the assessed task. Operational variables and threat Tactics, Techniques, and Procedures (TTPs) for assigned counter-tasks change in response to the execution of Blue Forces (BLUFOR) tasks.

Complex Operational Environment: Changes to four or more operational variables impact the chosen friendly COA/mission. Brigade and higher units require all eight operational variables of Political, Military, Economic, Social, Infrastructure, Information, Physical environment, and Time (PMESII-PT) to be replicated in varying degrees based on the task being trained.

Single threat: Regular, irregular, criminal or terrorist forces are present.

Hybrid threat: Diverse and dynamic combination of regular forces, irregular forces, and/or criminal elements all unified to achieve mutually benefiting

effects.

This task should not be trained in MOPP 4.

Standards: The element retrieves the power plant equipment with auxiliary support systems,distribution system equipment, and organizational maintenance equipment according to higher Headquarters (HQ) directives, item specific Technical Manuals (TMs), and Standard Operating Procedures (SOPs) used for the disassembly of power plant and auxiliary support equipment.All equipment is retrieved and ready for movement not later than the time specified in the directive.

Note: Leaders are defined as the Commander, Executive Officer, First Sergeant, Operations Sergeant, Platoon Leaders, Platoon Sergeants, Squad Leaders, and Team Leaders.

Live Fire Required: No

Objective Task Evaluation Criteria Matrix:

| Plan and Prepare | | | Execute | | | | | | Assess | | |
|-------------------------|-------|--------------------------|-----------------------------|--|--------------------------|---------------|-----------------------------|--------------------------------------|------------------------------------|-----------------|---|
| Operational Environment | | | Training Environment (LV/C) | Training/Authorized % of Leaders Present at | % of Soldiers Present at | External Eval | % Performance Measures 'GO' | % Critical Performance Measures 'GO' | % Leader Performance Measures 'GO' | Task Assessment | |
| SQD & PLT | | | | | | | | | | | |
| Dynamic (Single Threat) | Night | IAW unit CATS statement. | | >=85% | >=80% | Yes | >=91% | All | >=90% | T | |
| | Day | | | 75-84% | | | 80-90% | | 80-89% | T- | |
| Static (Single Threat) | Night | | | 65-74% | 75-79% | No | 65-79% | <All | >=79% | P | |
| | Day | | | 60-64% | 60-74% | | 51-64% | | | P- | |
| | | | | | | | | | | | |
| | | | | | <=59% | | <=59% | | | <=50% | U |

Remarks: None

Notes: All required references and technical manuals will be provided by the local Command.

Safety Risk: Medium

| |
|------------------------|
| Task Statements |
|------------------------|

Cue: None

DANGER

1. THIS TASK SHOULD ONLY BE PERFORMED BY QUALIFIED PERSONNEL WHO ARE KNOWLEDGEABLE IN THE INSTALLATION, OPERATION, AND MAINTENANCE OF MEDIUM-VOLTAGE ELECTRICAL POWER GENERATION EQUIPMENT AND ITS ASSOCIATED HAZARDS. FAILURE TO COMPLY MAY CAUSE PERMANENT INJURY OR DEATH.
2. REMOVE RINGS, NECKLACES, OTHER JEWELRY AND LOOSE CLOTHING. FAILURE TO COMPLY MAY CAUSE PERMANENT INJURY OR DEATH.
3. DO NOT OPERATE THE GENERATOR SET UNLESS IT HAS BEEN PROPERLY GROUNDED. FAILURE TO COMPLY MAY CAUSE PERMANENT INJURY OR DEATH.

Leaders have an inherent responsibility to conduct Risk Management to ensure the safety of all Soldiers and promote mission accomplishment.

WARNING

Risk management is the Army's primary decision-making process to identify hazards, reduce risk, and prevent both accidental and tactical loss. All Soldiers have the responsibility to learn and understand the risks associated with this task.

CAUTION

NOISE LEVELS IN EXCESS OF 85 DECIBELS EXIST WITHIN A 50-FOOT RADIUS OF OPERATING EQUIPMENT. ALWAYS WEAR SINGLE HEARING PROTECTION WITHIN A 50-FOOT RADIUS OF OPERATING EQUIPMENT. FAILURE TO COMPLY MAY CAUSE INJURY.

Identifying hazards and controlling risks across the full spectrum of Army functions, operations and activities is the responsibility of all Soldiers.

NOTE: Assess task proficiency using the task evaluation criteria matrix.

| STEP/MEASURE | GO | NO-GO | N/A |
|--|----|-------|-----|
| + 1. The element coordinates the external support required for moving the equipment. Coordinates: | | | |
| + a. Transportation and shipping containers. | | | |
| + b. Materials handling equipment. | | | |
| + c. Fabrication of packing and crating materials. | | | |
| + 2. The element performs power plant retrieval management. | | | |
| + a. Determines and records the operational condition and serviceability of the power plant equipment. | | | |
| + b. Determines the serviceability of auxiliary support systems and equipment. | | | |
| + c. Closes out and packs the power plant operational, maintenance, and safety records. | | | |
| d. Inventories and packs the following: | | | |
| (1) Power plant crew's bench stock. | | | |
| (2) Power plant crew's Test, Measurement and Diagnostic Equipment (TMDE). | | | |
| (3) Power plant's Petroleum Oil, and Lubricant (POL) products that are not turned in. | | | |
| +* 3. The element leader performs distribution system retrieval management. | | | |
| + a. Prepares a distribution system retrieval Critical Path Method (CPM) diagram. | | | |
| + b. Assembles work crews and assigns their responsibilities. | | | |
| + c. Determines and records the operational condition and serviceability of the distribution system equipment. | | | |
| + 4. The power plant organizational maintenance team performs organizational maintenance after mission management. | | | |
| + a. Records all current faults on the maintenance work sheet. | | | |
| + b. Updates and packs the power plant and distribution equipment historical records. | | | |
| + c. Inventories and packs the following: | | | |
| (1) Prescribed Load List (PLL). | | | |
| (2) Maintenance tools and special repair items. | | | |
| (3) Maintenance shop bench stock. | | | |
| (4) Maintenance shop TMDE. | | | |
| (5) Maintenance shop POL products that are not turned in. | | | |
| + 5. The element performs a work project hazards analysis, identifying the following potential hazards, along with equipment and procedures for mitigating them: | | | |
| + a. Mechanical hazards. | | | |
| + b. Electrical hazards. | | | |
| + c. Chemical hazards. | | | |
| +* 6. The element leader conducts a work project safety briefing, reviewing the following requirements: | | | |
| + a. Personal Protective Equipment (PPE). | | | |
| + b. Ground guides for vehicles and materials handling equipment. | | | |
| + c. Hand and arm signals to communicate boom, hook, or fork movement of materials and equipment. | | | |
| + d. Individual safe conduct on the job. | | | |
| + e. Safe use and handling of flammable, combustible, and hazardous materials. | | | |
| + f. Safe handling of pest and rodent control materials. | | | |
| + g. Application of safe clearances. | | | |
| + 7. The element disassembles and prepares power plant and distribution equipment for movement. | | | |
| +* 8. The element leader prepares an After Action Report (AAR) and conducts a mission completion briefing. | | | |

| TASK PERFORMANCE / EVALUATION SUMMARY BLOCK | | | | | | | |
|---|---|---|---|---|---|---|-------|
| ITERATION | 1 | 2 | 3 | 4 | 5 | M | TOTAL |
| TOTAL PERFORMANCE MEASURES EVALUATED | | | | | | | |
| TOTAL PERFORMANCE MEASURES GO | | | | | | | |
| TRAINING STATUS GO/NO-GO | | | | | | | |

Page 4

COMMANDER/LEADER ASSESSMENT:**T P U****Mission(s) supported:** None**MOPP 4:** Never**MOPP 4 Statement:** None**NVG:** Never**NVG Statement:** None**Prerequisite Collective Task(s):**

| Step Number | Task Number | Title | Proponent | Status |
|-------------|-------------|--------------------------------------|-----------------------------|----------|
| | 05-BN-5700 | Conduct Prime Power Support Missions | 05 - Engineers (Collective) | Approved |

Supporting Collective Task(s):

| Step Number | Task Number | Title | Proponent | Status |
|-------------|-------------|---|---------------------------------|----------|
| | 05-CO-5001 | Perform Project Management | 05 - Engineers (Collective) | Approved |
| | 05-PLT-5733 | Perform Power Plant and Distribution Equipment Shipment | 05 - Engineers (Collective) | Approved |
| | 71-CO-5100 | Conduct Troop Leading Procedures for Companies | 71 - Combined Arms (Collective) | Approved |
| 8. | 05-CO-0018 | Conduct Report Procedures | 05 - Engineers (Collective) | Approved |

OPFOR Task(s):

| Task Number | Title | Status |
|-------------|---------------------------------------|----------|
| 71-CO-8502 | OPFOR Execute an Ambush | Approved |
| 71-CO-8504 | OPFOR Execute a Reconnaissance Attack | Approved |

Supporting Individual Task(s):

| Step Number | Task Number | Title | Proponent | Status |
|-------------|--------------|---|-----------------------------|----------|
| | 052-204-1108 | Inspect Safety Equipment | 052 - Engineer (Individual) | Approved |
| | 052-204-1113 | Prepare a Manhole for Safe Entry | 052 - Engineer (Individual) | Approved |
| | 052-204-1114 | Rescue an Injured Victim From a Utility Pole | 052 - Engineer (Individual) | Approved |
| | 052-204-1117 | Inspect Hot-Line Equipment | 052 - Engineer (Individual) | Approved |
| | 052-204-1119 | Perform Operator Preventive-Maintenance Checks and Services (PMCS) on a Line Truck With Auxiliary Equipment | 052 - Engineer (Individual) | Approved |
| | 052-204-1120 | Install a Grounding Set | 052 - Engineer (Individual) | Approved |
| | 052-204-1125 | Operate a Line Truck with Auxiliary Equipment | 052 - Engineer (Individual) | Approved |
| | 052-204-1127 | Perform Groundman Duties | 052 - Engineer (Individual) | Approved |
| | 052-204-1202 | Maintain Rigging/Hoisting Equipment | 052 - Engineer (Individual) | Approved |
| | 052-204-1203 | Perform Operator Preventive-Maintenance Checks and Services (PMCS) on a Bucket/Material Handler Truck | 052 - Engineer (Individual) | Approved |
| | 052-204-1204 | Tie Rope Knots and Splices | 052 - Engineer (Individual) | Approved |
| | 052-204-1212 | Operate a Bucket/Material Handler Truck | 052 - Engineer (Individual) | Approved |
| | 052-204-2105 | Perform a Power Pole Serviceability Inspection | 052 - Engineer (Individual) | Approved |
| | 052-204-2207 | Conduct a Safety Briefing | 052 - Engineer (Individual) | Approved |
| | 052-204-2208 | Conduct a Safety Inspection | 052 - Engineer (Individual) | Approved |
| | 052-204-2217 | Manage a Power Line Crew | 052 - Engineer (Individual) | Approved |
| | 052-204-2301 | Perform Switching, Blocking and Tagging Procedures | 052 - Engineer (Individual) | Approved |
| | 052-210-1101 | Manage Risk Management of Power Generation Systems | 052 - Engineer (Individual) | Approved |
| | 052-210-1104 | Manage Lock out and Tag out Procedures | 052 - Engineer (Individual) | Approved |
| | 052-210-1110 | Manage Load Assessment | 052 - Engineer (Individual) | Approved |
| | 052-210-1124 | Manage Risk Mgmt Proc. for Power Systems | 052 - Engineer (Individual) | Approved |
| | 052-210-1127 | Manage Electrical-Power Generation and Distribution Equipment Retrieval | 052 - Engineer (Individual) | Approved |
| | 052-210-1141 | Manage Power Generation and Distribution Equipment Operations | 052 - Engineer (Individual) | Approved |
| | 052-210-1144 | Manage Disaster Relief Operations | 052 - Engineer (Individual) | Approved |
| | 052-244-2142 | Prepare a Power Plant for Movement | 052 - Engineer (Individual) | Approved |

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

| Task ID | Title |
|-------------|------------------------------|
| ART 4.1.7.4 | Supply Mobile Electric Power |

TADSS

| TADSS ID | Title | Product Type | Quantity |
|--------------------|-------|--------------|----------|
| No TADSS specified | | | |

Equipment (LIN)

| LIN | Nomenclature | Qty |
|------------------------|--------------|-----|
| No equipment specified | | |

Materiel Items (NSN)

| NSN | LIN | Title | Qty |
|-----------------------------|-----|-------|-----|
| No materiel items specified | | | |

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. .